

REMARKS

Claims 26-30, 71 and 77 have been amended. Claims 30 and 32 have been canceled. Claims 26-29, 31, 71 and 77 remain pending. Applicant reserves the right to pursue the original claims and other claims in this and other applications. Please reconsider the above-referenced application in light of the amendments and following remarks.

Claims 26-32, 71 and 77 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,277,733 B1 ("Smith"). The rejection is respectfully traversed.

The cited reference does *not* disclose Applicant's claimed composition. For example, Smith does not disclose a plasma etching composition consisting essentially of "*two fluorocarbons and ammonia . . . [which] form a reactive mixture,*" as recited in claim 26 (emphasis added), or "*CF₄, at least one other fluorocarbon and NH₃, . . . [which] form a reactive mixture,*" as recited in claim 71 (emphasis added), or "*at least one fluorocarbon, at least one additional gas selected from the group consisting of oxygen and nitrogen, and ammonia . . . [which] form a reactive mixture,*" as recited in claim 77 (emphasis added).

The Office Action asserts that Smith teaches that a wafer is subjected to the same composition as Applicant claims (p. 2, ¶2). Applicant respectfully disagrees. Smith discloses that a "wafer would be subjected to a plasma which contains H₂ (deuterium or a hydrogen-containing gas, such as ammonia, can be used in place of H₂) . . . and CF₄, (or *other* fluorocarbon)." (Col. 4, ll. 34-35) (emphasis added). Smith's composition consists of H₂ (or ammonia) and a single fluorocarbon.

Smith does not disclose "*two* fluorocarbons and ammonia," as recited in claim 26 (emphasis added), or "*CF₄, at least one other fluorocarbon* and NH₃," as recited in claim 71 (emphasis added), or "*at least one fluorocarbon, at least one additional gas selected from the group consisting of oxygen and nitrogen, and ammonia,*" as recited in claim 77 (emphasis added). In short, Smith does not disclose a composition that contains two fluorocarbons, or *at least one other* fluorocarbon with CF₄, much less at least one additional gas that is selected from the group consisting of oxygen and nitrogen and at least one fluorocarbon. Smith's composition, at best, consists of a *single* fluorocarbon and ammonia.

Claims 27-29 and 31 depend from claim 26 and should be similarly allowable along with claim 26 for at least the reasons provided above with regard to claim 26, and on their own merits.

Smith does not disclose "*at least two* fluorocarbons," as recited in claims 27-29 and 31. Smith discloses a plasma mixture that consists of H₂ (or ammonia) and a *single* fluorocarbon. Smith does not teach a composition with at least *two* fluorocarbons. These are additional reasons for the allowance of dependent claims 27-29 and 31.

Claim 77 stands rejected under 35 U.S.C. § 102(b) as being anticipated by JP 54-054578 ("Fumio"). The rejection is respectfully traversed.

Fumio does not teach a plasma etching composition consisting essentially of "*at least one fluorocarbon, at least one additional gas selected from the group consisting of oxygen and nitrogen, and ammonia . . . [which] form a reactive mixture,*" as recited in claim 77 (emphasis added).

Fumio discloses "using the plasma of *mixed gases of CF₄ and NH₃* at the time of etching the PSG film and SiO₂ film formed on Si substrates." (Abstract) (emphasis added). In other words, Fumio teaches a plasma consisting of only *two* gases: CF₄ and NH₃. Fumio does *not* teach "*at least one additional gas* selected from the group consisting of oxygen and nitrogen," as recited in claim 77 (emphasis added).

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to withdraw the outstanding rejection of the claims and to pass this application to issue.

Dated: November 17, 2005

Respectfully submitted,

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